



# **San Jacinto River Waste Pits Superfund Site**

## **Site Briefing For EPA HQ**

**September 21, 2017**



# San Jacinto River Waste Pits

South  
Impoundment  
1965







# Site History

- 1960s: Paper mill waste disposal.
- 2008: EPA adds Site to the NPL.
- 2009: EPA Order to McGinnis and International Paper to conduct RI/FS.
- 2010: McGinnis & International Paper sign Consent Order to construct a temporary cap.
- 2011: Temporary cap completed.
- 2012, 2013, 2014, 2015, 2016, 2017: Cap repairs
- 2014: PRPs submit initial draft FS. EPA asks USACE input.



# Site History

- 2015: EPA dive team discovers 20 foot gap in the temporary cap; dioxin exposed. PRP's ordered to repair the cap. Intense media interest.
- 2016:
  - Another cap repair needed, inspection protocols updated.
  - 8 foot deep scour found near cap.
  - EPA assumed authorship of the FS.
  - Remedy Review Board, HQ dioxin risk assessors, Contaminated Sediment Workgroup, ORD and OSRTI consulted on Proposed Plan.



# Changing River Conditions

1966



1997





# Preferred Alternative

## Northern Waste Pits

- Remove 152,000 cubic yards of waste for offsite disposal.
- Cost: \$105 million.

## Southern Impoundment

- Remove 50,000 cubic yards of waste for offsite disposal.
- Cost: \$9.9 million.



# Preferred Alternative Rationale

- Dioxin waste is highly toxic and persistent (100s of years).
- High threat of repeated storms and constant river flow against man-made features.
- The history of armor cap maintenance.
- Avoids catastrophic release in un-controlled situation [USACE projected significant loss over 80% cap area].





# Other Alternatives Considered

- ⊘ No further action.
- ⊘ Institutional controls.
- ⊘ Upgraded caps.
- ⊘ Partial Solidification/Stabilization.
- ⊘ Partial removal alternatives.



None are Reliable for all Storm Events

# Public Comment Period

- September 29, 2016 to January 12, 2017; public meeting in October 2016.
- 7,000 written comments received – [94% in favor of removal, 3% opposed, 3% no preference]
- 48,000 petition signatures



# Site Stakeholders

- San Jacinto River Coalition
- Galveston Bay Foundation
- Coastal Conservation Association Texas
- San Jacinto River Fleet
- San Jacinto Citizens Against Pollution (CAP)
- Sediment Management Workgroup
- Texas Association of Business
- McGinnes [Waste Management]
- International Paper



# Site Stakeholders

- Texas Commission on Environmental Quality
- Harris County
- City of Baytown
- Port of Houston Authority
- Federal & State Trustees (NOAA, USFWS, TCEQ, TX GLO, TPWD)
- Congressional – Babin (R-TX36); Green (D-TX29);
- USACE, USGS



# Key Issues

- ***Would an improved cap be permanent?***
  - Last year USACE modeling report said a huge storm could have significant erosion on 80% of cap.
    - ❑ PRPs could not duplicate USACE model results.
    - ❑ USACE performing additional modeling for Alternative 3aN.
  - Historical photos show loss of land; flood & site history demonstrate erosion & river morphology changes.
    - ❑ 8-ft deep scour adjacent to cap in 2016.
- ***Can Principal Threat Waste be excavated without spreading pollution?***
  - PRPs & others fear dioxin release inevitable with removal.
  - USACE indicated that excavation in the “dry” behind cofferdam could be accomplished without material release.

## Cost Estimates

- Enhanced cap (Alternative 3aN):
  - Proposed Plan: \$24.8 million
  - Now: \$80 million (100 yr. O&M & 0.7% discount rate)
- Excavation & disposal (Alternative 6N):
  - Proposed Plan: \$87 million
  - Now: \$105 million\* (with cofferdam & dry excavation)